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EXAMINER				
MISLEH, JUSTIN P				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/807,840

**Applicant(s)**

TOM, ALFRED

**Examiner**

JUSTIN P. MISLEH

**Art Unit**

2622

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 26-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of **Species I** in the reply filed on January 3, 2008 is acknowledged. The traversal is on the grounds that the propriety of the restriction requirement has not been established and there would be undue prejudice to Applicant. Upon reconsideration of the election of species, the Examiner has reconfigured the species in a manner that satisfies Applicant's concerns: (a) that there insufficient reasoning that there would be a serious burden on the Office; and (b) that there is a potential risk for limiting scope of protection.
2. The Examiner the following accurately represents the two patentably distinct embodiments of Applicant's invention.

**Species I (figures 1 – 4)** – This species pertains to an embodiment that is directed to a wireless phone having a removable camera module, such that a top display half is rotatable with respect to a bottom keyboard half and such rotation triggers a changing of phone mode. A typical search for these features would be mostly contained within Class 455.

**Species II (figures 5 – 7)** – This species pertains to an embodiment that is directed to a wireless phone with a particular arrangement of buttons and a strap to facilitate use of the camera. A typical search for these features would be mostly contained within Class 348.

3. Applicant elected **Species I**, which based upon the Examiner's reconfiguration of the species, is directed towards figures 1 – 4. The Examiner believes **Claims 1 – 17 and 26 – 28** are directed towards this species and will be examined accordingly. However, **Claims 18 – 25** are

withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-6, 8-17** are rejected under 35 U.S.C. 102(b) as being anticipated by Yamagishi (US 6,327,001 B1).

6. For **Claim 1**, Yamagishi discloses, as shown in figure 14, a clam-shell handset device comprising:

a screen half (top half) that contains a display (64); and

a keyboard half (bottom half) that contains a keyboard (66; see column 17, lines 41-43);

and

a hinge that connects the screen half to the keyboard half and allows the two to rotate with respect to each other (not labeled in the figure; however, see column 18, 1-17); and

a means for the clam-shell handset device to change its mode of operation depending on the angle of the hinge (again not labeled in the figure; however, see column 18, 1-17; “imaging switch is turned off” and “imaging switch is turned on”).

7. As for **Claim 2**, Yamagishi further discloses, as stated in column 18, lines 1-17, wherein one of the modes of operation is used to take a picture or video (“convenient for a user to perform imaging by looking at the viewfinder display screen”).

8. As for **Claim 3**, Yamagishi further discloses, as stated in column 18, lines 1-17, wherein a second modes of operation is used to make or receive a phone call (“set to a state suitable for communication such as telephoning”).

9. As for **Claim 4**, Yamagishi discloses where the information processing apparatus (300) may be angled by more than 90 degrees and postured so as to lie close to a user’s face for convenient speech and where the information processing apparatus is angled by about 90 degrees and postured so as to be convenient for a user to perform imaging by looking at the viewfinder display screen (see column 18, lines 1-17; emphasis added by Examiner).

Yamagishi’s modes of operation are angle- and posture-dependent; therefore, mechanisms to lock the hinge, detect angles, and provide rotational force are all necessary to set wireless phone into the proper mode of operation. Therefore, the operational mode is at least activated immediately when the hinge is at a specified angle. The Examiner respectfully notes the claim language “immediately” by itself is a relative term and cannot be narrowed to any particular instance without any additional points of reference.

10. As for **Claim 5**, Yamagishi discloses where the information processing apparatus (300) may be angled by more than 90 degrees and postured so as to lie close to a user’s face for convenient speech and where the information processing apparatus is angled by about 90 degrees and postured so as to be convenient for a user to perform imaging by looking at the viewfinder display screen (see column 18, lines 1-17; emphasis added by Examiner).

Yamagishi's modes of operation are angle- and posture-dependent; therefore, mechanisms to lock the hinge, detect angles, and provide rotational force are all necessary to set wireless phone into the proper mode of operation. Therefore, the operational mode is at least activated immediately when the hinge is at a specified angle. The Examiner respectfully notes the claim language "pre-determined amount of time" by itself is a relative term that can include "immediately" and cannot be narrowed to any particular instance without any additional points of reference.

11. As for **Claim 6**, Yamagishi discloses where the information processing apparatus (300) may be angled by more than 90 degrees and postured so as to lie close to a user's face for convenient speech and where the information processing apparatus is angled by about 90 degrees and postured so as to be convenient for a user to perform imaging by looking at the viewfinder display screen (see column 18, lines 1-17; emphasis added by Examiner). Therefore, while Yamagishi does not disclose the specifics of the hinge (neither drawn nor written), such as where the hinge contains a locking mechanism to lock the hinge at an angle corresponding to a mode operation and a mechanical release that releases the locking mechanism, these elements must be (i.e., inherent) within Yamagishi for Yamagishi to operate as specifically as described above. Yamagishi's modes of operation are angle- and posture-dependent; therefore, mechanisms to lock the hinge, detect angles, and provide rotational force are all necessary to set wireless phone into the proper mode of operation.

12. As for **Claim 8**, again, Yamagishi discloses where the information processing apparatus (300) may be angled by more than 90 degrees and postured so as to lie close to a user's face for convenient speech and where the information processing apparatus is angled by about 90

degrees and postured so as to be convenient for a user to perform imaging by looking at the viewfinder display screen (see column 18, lines 1-17; emphasis added by Examiner). Therefore, while Yamagishi does not disclose the specifics of the hinge (neither drawn nor written), such as where the hinge contains a mechanism the senses when the hinge is at certain angles, these elements must be (i.e., inherent) within Yamagishi for Yamagishi to operate as specifically as described above. Yamagishi's modes of operation are angle- and posture-dependent; therefore, mechanisms to lock the hinge, detect angles, and provide rotational force are all necessary to set wireless phone into the proper mode of operation.

13. As for **Claim 9**, again, Yamagishi discloses where the information processing apparatus (300) may be angled by more than 90 degrees and postured so as to lie close to a user's face for convenient speech and where the information processing apparatus is angled by about 90 degrees and postured so as to be convenient for a user to perform imaging by looking at the viewfinder display screen (see column 18, lines 1-17; emphasis added by Examiner). Therefore, while Yamagishi does not disclose the specifics of the hinge (neither drawn nor written), such as where the hinge contains a cam mechanism that encourages the hinge to stay at an angle that activates a mode of a operation until a force is applied to the screen half that is greater than the force required to rotate the hinge when the hinge is not at an angle that activates a mode of operation, these elements must be (i.e., inherent) within Yamagishi for Yamagishi to operate as specifically as described above. Yamagishi's modes of operation are angle- and posture-dependent; therefore, mechanisms to lock the hinge, detect angles, and provide rotational force are all necessary to set wireless phone into the proper mode of operation.

14. For **Claim 10**, Yamagishi discloses, as shown in figure 14, a clam-shell handset device comprising:

a screen half (top half) that contains a display (64); and

a keyboard half (bottom half) that contains a keys (66; see column 17, lines 41-43) and an image sensor (200); and

a hinge that connects the screen half to the keyboard half and allows the two to rotate with respect to each other (not labeled in the figure; however, see column 18, 1-17); wherein

the orientation of the image sensor (200) is along a first axis that is perpendicular to a second axis that is pointed in the same direction as the direction the keys move when they are actuated (See figure 14; In the figure, the keys 66 would be depressed downwardly while the image sensor is aligned horizontally and perpendicular to the depression direction of the keys).

15. As for **Claim 11**, Yamagishi clearly discloses, in figure 14, wherein the keyboard half (66) contains a camera lens (200).

16. As for **Claim 12**, Yamagishi clearly discloses, in figures 12 and 14, wherein the camera lens (200) is in a module that is removably connected to the keyboard half.

17. As for **Claim 13**, Yamagishi discloses, in figures 12 and 14 and in column 17 (line 8), where the module contains a flash (38).

18. As for **Claim 14**, Yamagishi discloses, as stated in column 19 (lines 10-15), wherein the module can be replaced by a second module that contains a lens with a different focal length than the lens in the first module.



19. As for **Claim 15**, Yamagishi discloses, as stated in column 17 (line 8) and in column 19 (lines 10-15), wherein the module (200) and keyboard half communicate information over the removable connection.

20. As for **Claim 16**, Yamagishi discloses, wherein the lens (200) is located on [a] side (rear side, for purposes of interpretation of this claim) of the keyboard half (66) that both contains the hinge (figure 14 shows that the hinge is also located on the rear side) and is perpendicular and adjacent to [a] side with the keys (top side); and the lens (200) is pointed orthogonal to the side on which it is located (clearly seen in the left half of figure 14).

For this claim, the Examiner interprets the hinge as being on the rear side of the keyboard half (which is the same side that the camera lens/module 200 is on). Support for this interpretation can be found in the right side image of figure 14. The Examiner respectfully notes not much is provided, in terms of the claim language, to define or somehow differentiate the side(s) from one another.

21. As for **Claim 17**, Yamagishi discloses, wherein the lens (200) is located on [a] side (rear side) of the keyboard half (66) that is both adjacent to the side with the keys (top side) and directly opposite (front side) from [a] side that contains the hinge; and the lens (200) is pointed orthogonal to the side on which it is located (clearly seen in the left half of figure 14).

For this claim, the Examiner interprets the hinge as being on the front side of the keyboard half (which is the opposite side that the camera lens/module 200 is on). Support for this interpretation can be found in the right side image of figure 14. The Examiner respectfully notes not much is provided, in terms of the claim language, to define or somehow differentiate the side(s) from one another.

***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi (US 6,327,001 B1) in view of Shibata et al. (US 7,084,919 B2).

24. As for **Claim 7**, Yamagishi discloses a device that stays in camera mode when the angle between the top half and the bottom half is between 0 degrees and 90 degrees and that stays in the phone mode when the angle between the top half and the bottom half is greater than 90 degrees, wherein the camera mode the top half (screen) faces the user; however, Yamagishi does not disclose wherein there are two different hinge angles that activate the camera mode; and the direction of the screen when hinge is at the first camera mode angle is opposite to the direction of the screen when the hinge is at the second angle.

On the other hand, Shibata et al. (US 7,084,919 B2) also disclose a clam-shell handset device with a screen half that contains a display and a bottom half that contains an operating unit. More specifically, Shibata et al. show, in figures 5 and 11, a first camera mode in which the screen is inwardly facing the operation unit and a second camera mode in which the screen is outwardly facing the operation unit, respectively. Furthermore, as shown in figures 1 and 2, show camera modes where the hinge is at 270 degrees. In other words, there are a plurality of hinge angles (more than 2) which activate the camera mode of which two of the angles include

positions where the screen are opposite of each other (see figure 14 and column 13, line 61 – column 14, line 8, for support).

The Examiner respectfully submits, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a plurality of hinge angles which activate at least more than one camera mode, as taught by Shibata et al., in the clam-shell handset device, disclosed by Yamagishi, for the advantage of *providing a portable terminal with a plurality of functions in a small and light device* (see Shibata et al., column 2, lines 12-23).

#### ***Cited Prior Art***

25. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure for the following reasons:

- **US 6,069,648** at least discloses a clam-shell handset device with an upper case and lower case that are rotatably connected that supports a plurality of functions, including a camera function.

#### ***Allowable Subject Matter***

26. **Claims 26-28** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

At least for **Claim 26**, the closest prior art discloses, as described above, clam-shell handset device that includes a plurality of functions in a small and light device; however, the

closest prior art does not teach or fairly suggest an additional mode that is a picture browsing mode, wherein the picture browsing mode shows images stored on the device; and the picture browsing mode is activated when the hinge is moved from the camera mode angle to the angle for making or receiving a phone call.

### ***Conclusion***

27. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Justin P. Misleh/  
Primary Examiner  
Group Art Unit 2622  
December 22, 2008